

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. Cancelled.
2. Cancelled.
3. Cancelled.
4. Cancelled.
5. Cancelled.
6. **(Currently Amended)** A digital receiver part of a spread spectrum receiver for processing a digital signal, said receiver part comprising:
 - an input for an intermediate-frequency signal[,:];
 - an output for outputting a carrier and code demodulated signal[,:];
 - a spreading code demodulator part, to whose input is connected the intermediate-frequency signal[,:];
 - a carrier demodulator part, which succeeds the spreading code demodulator part on ~~the signal~~ a path of said digital signal[,:]; and

a processing part, which succeeds the carrier demodulator part on ~~the signal~~ said path, and from whose out put ~~a~~ the carrier and code demodulator signal is obtained,

the spreading code demodulator part comprising at least two signal paths, both of which comprise

- a) a code mixer for code ~~demodulator~~ demodulation of the digital signal by means of a local spreading code replica, and
- b) first means for lowering ~~a~~ the sampling frequency of the digital signal, said first means being arranged to succeed the code mixer on ~~the signal~~ said path, and

the carrier demodulator part comprising

- a) a carrier mixer for carrier ~~demodulator~~ demodulation of the digital signal by means of a local carrier replica, and
- b) a multiplexer for directing signals from ~~the~~ outputs of the first means of the spreading code demodulator part in a time multiplexed manner to the carrier mixer.

7. **(Currently Amended)** A receiver part as claimed in Claim 6, wherein the carrier demodulator part of the receiver part further comprises:

second means for lowering the sampling frequency of the digital signal, said second means being arranged between said carrier mixer and processing part on the signal said path.

8. Cancelled.

9. Cancelled.

10. **(Currently Amended)** A spread spectrum receiver for receiving a spread spectrum signal and for generating a carrier and code demodulated signal, the receiver comprising:

a radio-frequency part for filtering the a desired frequency component from the received spread spectrum signal and for mixing said frequency component to an intermediate frequency, and

a digital receiver part to which an intermediate-frequency signal is applied and from whose output a the carrier and code demodulated signal is obtained, the digital receiver part comprising

a spreading code demodulator part, to whose input is connected ~~an~~ the intermediate-frequency signal, a carrier demodulator part, which succeeds the spreading code demodulator part on a the signal path of said intermediate-frequency signal, and a processing part, which succeeds the carrier demodulator part on the signal said path, and from whose output a the carrier and code demodulated signal is obtained.

the spreading code demodulator part comprising at least two signal paths, both of which comprise

- a) a code mixer for code demodulation of the intermediate-frequency signal by means of a local spreading code replica, and
- b) first means for lowering a the sampling frequency of the intermediate-frequency signal signal,

said means being arranged to succeed the code mixer on the signal said path, and the carrier demodulator part comprising

- a) a carrier mixer for carrier demodulator demodulation of the intermediate-frequency signal by means of a local carrier replica, and
- b) a multiplexer for directing signals obtained from the outputs of the first means of the spreading code demodulator part in a time multiplexed manner to the carrier mixer.

11. **(Currently Amended)** A receiver as claimed in Claim 10, wherein the carrier demodulator part of the receiver part further comprises second means for lowering the sampling frequency of the intermediate-frequency signal, said second means being arranged between said code mixer and processing part on the signal said path.

12. (New) The digital receiver part of claim 6, wherein said code mixer narrows a signal spectrum for said digital signal to a width of data modulation.

13. (New) The digital receiver part of claim 6, wherein said carrier mixer shifts the digital signal to a base frequency by removing a carrier frequency and a Doppler shift.

14. (New) The digital receiver part of claim 6, wherein said first means comprises a low-pass filter and a decimator.

15. (New) The digital receiver part of claim 6, wherein said spreading code demodulator part further comprises:

a code generator for generating the local spreading code replica;

a frequency generation means for controlling said code generator; and,

a code tracking means for controlling the frequency generation means on the basis of an output of the carrier mixer.

16. (New) The digital receiver part of claim 6, wherein said carrier demodulator part comprises:

a frequency generator for generating the local carrier replica for the carrier mixer, and

a carrier tracking means for controlling the frequency generator on the basis of an output of the carrier mixer.

17. (New) The spread spectrum receiver of claim 10, wherein said code mixer narrows a signal spectrum for said intermediate-frequency signal to a width of data modulation.

18. (New) The spread spectrum receiver of claim 10, wherein said carrier mixer shifts the intermediate-frequency signal to a base frequency by removing a carrier frequency and a Doppler shift.

19. (New) The spread spectrum receiver of claim 10, wherein said first means comprises a low-pass filter and a decimator.

20. (New) The spread spectrum receiver of claim 10, wherein said spreading code demodulator part further comprises:

a code generator for generating the local spreading code replica;
a frequency generation means for controlling said code generator;
and,

a code tracking means for controlling the frequency generation means on the basis of an output of the carrier mixer.

21. (New) The spread spectrum receiver of claim 10, wherein said carrier demodulator part comprises:

a frequency generator for generating the local carrier replica for the carrier mixer, and

a carrier tracking means for controlling the frequency generator on the basis of an output of the carrier mixer.

22. (New) A digital receiver of a spread spectrum receiver for processing a digital signal and for outputting a carrier and code demodulated signal, said digital receiver comprising:

a spreading code demodulator comprising at least two signal paths, both of which include,

a code mixer for code demodulation of the digital signal using a local spreading code replica, and

a decimator for lowering a sampling frequency of the digital signal, said decimator arranged to succeed the code mixer on said path; and

a carrier demodulator, which succeeds the spreading code demodulator on said path, the carrier demodulator comprising,

a carrier mixer for carrier demodulation of the digital signal using a local carrier replica, and

a multiplexer for directing signals from outputs of the decimator in a time multiplexed manner to the carrier mixer.

The digital receiver part of claim 6, wherein said code mixer narrows a signal spectrum for said digital signal to a width of data modulation.

23. (New) The digital receiver of claim 22, wherein said carrier mixer shifts the digital signal to a base frequency by removing a carrier frequency and a Doppler shift.

24. (New) The digital receiver of claim 23, wherein said decimator includes a low-pass filter and a decimation means.

25. (New) The digital receiver of claim 23, wherein said spreading code demodulator part further comprises:

a code generator for generating the local spreading code replica;
a frequency generation means for controlling said code generator;
and,

a code tracking means for controlling the frequency generation means on the basis of an output of the carrier mixer.

26. (New) The digital receiver part of claim 23, wherein said carrier demodulator part comprises:

a frequency generator for generating the local carrier replica for the carrier mixer, and

a carrier tracking means for controlling the frequency generator on the basis of an output of the carrier mixer.